<center>IN THE CLAIMS</center>

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Currently amended) A method for performing red eye correction in an image, comprising:

providing a digital image, the digital image being represented by electrical signals in a computer system;

identifying a red eye region in the digital image; and

applying a color correction to each pixel in the identified red eye region[[,]]; and

wherein the identifying of the red eye region comprises:

identifying hard red areas, each of the hard red areas comprising a grouping of pixels having a color defined within a polyhedral region of a three dimensional hue-saturation-intensity (HSI) color space having a first axis defining hue, a second axis defining intensity, and a third axis defining saturation; and

excluding ones of the hard red areas from being identified as the red eye region when a virtual weight center of the hard red area deviates more than a selected percentage from a geometric center of the hard red area, the virtual weight center having an x-coordinate equal to a sum of an x-coordinate of each pixel of the hard red area divided by a number of pixels in the hard red area, and a y-coordinate equal to a sum of a y-coordinate of each of the pixels within the hard red area divided by the number of pixels in the hard red area ~~wherein the method for performing red eye correction in the image is automatic, requiring no input from a user to identify the red eye region, and to apply the color correction.~~

2-3.   (Canceled)

4.   (Currently amended) The method for performing red eye correction in an image as recited in ~~claim 3~~ claim 1, wherein each dimension of hue, saturation, and intensity

is scaled to be defined by a segment having coordinates [0.0; 1.0] and the color defined within the polyhedral region includes colors within a defined hue segment ~~is within a hue spectrum defined by the coordinates [0.0; 1.0], and~~, wherein the defined hue segment is within one of [0.0; 0.0694] and [0.9167; 1.0].

5.   (Canceled).

6.   (Currently amended) The method for performing red eye correction in an image as recited in ~~claim 5~~ claim 4, wherein ~~the defined region of~~ the HSI color space as projected on a two-dimensional ~~is within an area on a~~ plot of saturation verses intensity, ~~the area being defined as greater than or equal to a~~ is limited to a region circumvented by a polyline on the plot of saturation verses intensity, the polyline being defined by coordinates ~~including~~ consisting essentially of about [0.0; 1.0], [0.5; 1.0], [0.55; 0.34], and [1.0; 0.3].

7.   (Canceled).

8.   (Currently amended) The method for performing red eye correction in an image as recited in ~~claim 7~~ claim 1, ~~wherein the applying the filter to the identified red eye region includes applying at least one of a~~ further comprising excluding ones of the hard red areas from being identified as the red eye region based on at least one of: a size ~~filter~~ of the hard red area, a shape ~~filter~~ of the hard red area, a color weight ~~filter~~ of the hard red area, a brightness dispersion ~~filter~~ of the hard red area, and a spectral criteria ~~filter~~ of pixels surrounding the hard red area.

9.   (Canceled).

10.   (Currently amended) The method for performing red eye correction in an image as recited in ~~claim 2~~ claim 1, further comprising:

identifying a set of final red areas, the set of final red areas including the hard red areas and same color areas, each of the same color areas being a contiguous set of pixels built

around a real color center of a corresponding hard red area wherein each pixel of the contiguous set of pixels has a color that is within a predetermined color distance from an average color of the hard red area, the real color center being a pixel of the hard red area having ~~identifying a virtual weight center for the identified red eye region in the digital image; and identifying a real color center for the identified red eye region in the digital image, wherein the virtual weight center is determined using a pixel's corresponding coordinates in a plot of saturation verses intensity in the HSI color space, and the real color center is defined as at least one pixel of all pixels within the identified red eye region with~~ an HSI value closest to ~~an arithmetic~~ the average ~~of HSI values for all pixels within the identified red eye region~~ color of the hard red area;

excluding one of the final red areas from being identified as the red eye region based on at least one of: a size of the final red area, a shape of the final red area, a color weight of the final red area, a brightness dispersion of the final red area, and a spectral criteria of pixels surrounding the final red area.

11.   (Currently amended) A method for performing red eye correction in a digital image, comprising:

identifying hard red areas in the digital image, each of the hard red areas comprising a grouping of pixels having a color defined within a polyhedral region of a three dimensional hue-saturation-intensity (HSI) color space having a first axis defining hue, a second axis defining intensity, and a third axis defining saturation;

identifying a real color center for the identified hard red areas, the real color center being defined as at least one pixel defining a point within the identified hard red area, the at least one pixel having values for hue, saturation and intensity closest of all pixels within the hard red area to the arithmetic averages of all pixels within the hard red area for hue, saturation, and intensity;

identifying a set of final red areas, the set of final red areas including the hard red areas and the real color areas;

filtering out non-red-eye red areas from the ~~identified~~ set of final red areas, the filtering including the disregarding of ones of the final red having areas that are too large for red eye effect, areas of an inappropriate shape to have red eye; areas of insufficient color

intensity; areas of insufficient brightness dispersion, and areas failing to match a pre-determined spectral criteria;

defining a region having red eye effect, the region having red eye effect being one of the final red areas that survived the filtering; and

applying a color correction to the defined region,

wherein the method is performed automatically and without user input to define and to correct the region having red eye effect.

12.   (Canceled).

13.   (Canceled).

14.   (Original) The method of claim 11, wherein the applying of the color correction includes manipulation of saturation and intensity of pixels within the defined region.

15.   (Original) The method of claim 11, wherein the applying of the color correction includes manipulating the hue, saturation, and intensity of pixels within the defined region to match a hue, saturation, and intensity of an identified true eye color.

16.   (Currently amended) Computer readable media ~~having program instructions~~ encoded with a computer program for removal of red eye effect in a digital image, the ~~computer readable media~~ computer program comprising:

program instructions for automatically defining a region of the digital image having red eye effect; and

program instructions for automatically applying a color correction to the defined region, .

wherein ~~user input is not required to define the region of the digital image having red eye effect and user input is not required to apply the color correction to the defined region~~ the defining of the region of the digital image having the red eye effect comprises:

identifying hard red areas, each of the hard red areas comprising a grouping of pixels having a color defined within a polyhedral region of a three dimensional hue-saturation-intensity (HSI) color space having a first axis defining hue, a second axis defining intensity, and a third axis defining saturation; and

excluding ones of the hard red areas from being identified as the red eye region when a virtual weight center of the hard red area deviates more than a selected percentage from a geometric center of the hard red area, the virtual weight center having an x-coordinate equal to a sum of an x-coordinate of each pixel of the hard red area divided by a number of pixels in the hard red area, and a y-coordinate equal to a sum of a y-coordinate of each of the pixels within the hard red area divided by the number of pixels in the hard red area.

17.   (Canceled).

18.   (Currently amended) The computer readable media of claim 16, ~~further comprising~~ wherein the computer program further comprises:

program instructions for ~~filtering the automatically defined region of the digital image having red eye effect, the filtering including filters for~~ excluding ones of the hard red areas too large for red eye effect, ones of the hard red areas ~~of~~ having an inappropriate shape to have red eye; ones of the hard red areas of insufficient color intensity; ones of the hard red areas of insufficient brightness dispersion, and ones of the hard red areas in which surrounding pixels fail ~~failing~~ to match a pre-determined spectral criteria.

19.   (Original) The computer readable media of claim 16, wherein the program instructions for automatically applying a color correction to the defined region include instructions to manipulate saturation and intensity of pixels within the defined region.

20.   (Original) The computer readable media of claim 16, wherein the program instructions for automatically applying a color correction to the defined region include instructions to manipulate hue, saturation, and intensity of pixels within the defined region to match the hue, saturation, and intensity of an identified true eye color in the digital image.